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Date: 04/12/2012 05:21 PM
Subject: Draft Permit Comments : PPL Brunner Island LLC : PA0008281

Julian,

According to our Memorandum of Agreement, the Environmental Protection Agency (EPA) Region III has received the draft National Pollutant Discharge Elimination System (NPDES) permit for the:

Draft Permit: PPL Brunner Island LLC
NPDES Number: PA0008281
EPA Draft Permit Received: March 13, 2012

Our records show that this is a major industrial permit classified under the applicable ELGs listed in the 40 CFR 423 as Steam Electric Power Generating Point Source Category. Based on our review of the draft permit, Fact Sheet/WQPR, and permit application, we offer the following comments for your consideration and action:

1. Elevated bromide levels in raw water can contribute to exceedences of Maximum Contaminant Levels (MCLs) for Total Trihalomethanes (TTHMs) at public water systems. EPA is looking into potential sources of bromide discharges, including wastewater from Steam Electric Power Generating Point Source Category, which could impact the TTHM exceedences. Page 2/2, Module 4, Analysis Results Table Pollutant Group 1, (Outfall 001 and Outfall 007), of the permit application indicates that bromide is present in the effluent. Therefore, PADEP should impose monitoring requirements in the draft permit for the referenced parameter of concern. Pages 43/53, Part C.II.I., of the draft permit states that "…the permitee shall collect at least one representative sample and analyze the sample for Total Arsenic, Total Cadmium, Total Chromium, Total Copper, Total Lead, Total Mercury, Total Nickel, Total Selenium, Total Silver, Total Thallium, and Total Zinc…" PADEP should add Total Bromide in this provision. Per our conversation (4.4.12), PADEP has committed to identify and document all chemical additives which are bromine based.

2. On June 7, 2010, EPA issued guidance entitled "National Pollutant Discharge Elimination System (NPDES) Permitting of Wastewater Discharges from Flue Gas Desulfurization (FGD) and Coal Combustion Residuals (CCR) Impoundments at Steam Electric Power Plants". As described in Appendix A of that guidance, the applicable Steam Electric Power Generating effluent limitations guidelines and standards promulgated in 1982 did not consider the FGD wastestream. Thus, technology-based limitations established on a best professional judgment (BPJ) basis to address FGD wastewater at steam electric power plants are appropriate. To assist in the development of such limits, the guidance mentioned above provides state permitting authorities with information on how to establish technology-based effluent limits to address FGD

wastewater at steam electric power plants. We acknowledge that this facility has constructed a new Industrial Wastewater Treatment Plant (IWTP) to treat just the effluent from the FGD units and have been collecting data to establish effluent limitations and monitoring requirements for some but not all of the parameters of concerns listed in the above guidance. According to the Guidance, FGD wastewaters generally contain: metals; nitrogen compounds; bioaccumulative pollutants, and other priority pollutants. PADEP should document, justify, and specifically identify the parameters taken into consideration to establish the provided effluent characterization. The treated wastewater is currently being discharged thru Outfall 007 and this draft permit has proposed effluent limitations and monitoring requirements. In view of the fact that EPA is working to amend the applicable ELGs and that this facility has constructed a new treatment system to treat just the effluent from FGD, EPA requests that PADEP share FGD IWTP-related information (e.g., influent data, outfall effluent data, IWTP's specifications, and other related information) to assist in the ELG development process. EPA also requests that PADEP share this type of information with respect to IWTP treatment of equalization basin, bottom ash troughs, landfill leachate, and wastewater plant recycle that would be discharged thru Outfall 008. PADEP should also provide all IWTP-related information (e.g., influent data, outfall effluent data, IWTP's specifications, and other related information).

3. Page 46/53, Part C.IV., Toxics Reduction Evaluation (TRE), of the draft permit has proposed to impose a TRE to Outfall 007. PADEP should add a footnote in page 10/53, Part A.I.F., Outfall 007, of the draft permit witch states "See Part C.IV., for Toxics Reduction Evaluation (TRE) Requirements." Also, the language in paragraph IV.A.2.b lists a timeframe between permit issuance and the WQBEL effective date. As identified on pages 11 and 12 (note the references to pages 12 and 13 in paragraph IV.A.1. appear to be incorrect), the calculated WQBELs are to become effective at the permit effective date. Please revise the language in IV.A.2.b.

4. Page 53/53, Part C.VII.D; this provision should be amended to remove "within 6 months of the promulgation of 40 CFR § 122(r)(ii) and 40 CFR § 125.90-125.99." The BTA determination is required under 316(b) of the CWA and information needed to make that BTA determination is not contingent on promulgation of implementing regulations. Additionally, this provision should be amended to specifically identify the BTA review process and what would be the next steps to follow to support PADEP's BTA final determination.

5. Page 53/53, Part C.VIII., Biological Monitoring Studies, of the draft permit has proposed a requirement to assure compliance with 40 CFR § 125.72. This language should be amended to also specifically identify the variance review process and what would be the next steps to follow to support PADEP's variance determination including confirmation or rejection of the calculated heat rejection rates.

6. In regard to the data that has been used to calculate or estimate the WLAs and effluent limitations, PADEP should justify and document in the Fact Sheet/WQPR that the assumption of zero naturally occurring substances is adequate, consistent with PA's

"Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances."

7. Page 2/2, Module 4, Analysis Results Table Pollutant Group 1, (Outfall 007), of the permit application, lists a TDS average concentration of 37566.7 mg/L. Moreover, page 87/117, Content 12.5, TDS, of the WQPR states that "Since the facility was authorized to discharge TDS prior to August 21, 2010, no limit at this time…" Based on this argument, it is our understanding that in a major industrial individual permit, the permit writer must consider each facility on a case-by-case basis to determine whether it meets the federal regulations and/or applicable requirements. EPA strongly recommends PADEP to develop technology-based effluent limitations (TBELs), to develop water quality-based effluent limitations (WQBELs), to perform a reasonable potential analysis against the WQBEL, and to determine final effluent limitations, if necessary, that meet technology and water quality standards for the referenced parameter of concern.

Prior to finalizing this permit, please address the above comments and provide me with any changes to the draft permit. In addition, please forward to me any changes to the Fact Sheet / Pollution Report / WQPR, if necessary. If you prefer, electronic versions of these documents can be sent instead of hard copies. Electronic versions of all final permit documents and Fact Sheets / Pollution Reports / WQPRs are preferred as well.

If you have any questions concerning this matter, please, let me know.

Thanks

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